June 7, 2011 Water Supply Forecast Discussion

This forecast includes observed conditions through the morning of June 7, 2011. This forecast is posted at: http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up.

Forecast Summary:

The projected median April-July runoff has increased significantly in many basins and now ranges from 146 percent (Shasta Lake, Total Inflow and the Sacramento River above Bend Bridge) to 193 percent (Yuba and Kern rivers). All forecasts rose or remained the same compared to last week's forecast. Statewide, the forecast increased about four percent. From a regional perspective, the largest gains were in the Yuba, American, and Mokelumne basins which gained 7, 9, and 6 percent, respectively.

Runoff:

For all forecasted rivers, the flow rates for early June are greater than 110 percent of average. The Tuolumne River rate is about 110 percent of normal. The rates for the Tule River, Cosumnes River, and the rivers from the Feather River northward are above 180 percent of normal.

Precipitation:

During the first six days of June, the Northern Sierra 8-Station Index rose 1.7 inches which is 170 percent of the average expected for the whole month. The seasonal total through June 6 is 70.7 inches which is 148 percent of average-to-date and 141 percent of an average water year.

During the same period, the San Joaquin 5-Station Index rose 1.3 inches which is 217 percent of June's average. The seasonal total is 62.6 inches, which is 161 percent of average-to-date and 153 percent of an average water year. The amount of 1.3 inches, measured so far in June, is about 21 percent of the entire precipitation during a normal April-July period.

Snowpack:

According to snow sensor data for the morning of June 9, statewide snowpack is 83 percent (23 inches) of the April 1 average. On June 1, this value was 96 percent (27 inches). Therefore, according to the pillow data, the snowpack has lost 4 inches despite the precipitation.

Weather and Climate Outlooks:

The weather forecast for the next six days indicates no precipitation anywhere in the state. The significant change in the weather involves the freezing levels. By next Tuesday, a rise of these levels to 15000 to 16000 feet is expected over all regions of the Sierra.

The Climate Prediction Center's (CPC) six to ten day outlook (6/15/11-6/19/11) indicates and equal chance of above and below normal temperatures over all regions of the Sierra. During this same period, there is an increased chance of below normal precipitation over all areas of the state.

The CPC's one-month outlook for June, updated on May 31, suggests increased chances of below normal temperatures for all of California except the southern fifth of the state. During the same period, there is an increased chance of above normal precipitation over the northern two thirds of the state.

The CPC's three-month outlook (June-August, updated May 19) suggests increased chances of above normal temperatures for the Sierra Nevada and the Colorado River region. For all other regions

including most of the Shasta-Trinity area, equal chances of above or below normal temperatures are forecast. The same outlook suggests increased chances of below normal precipitation for the far northwest region of the state. For all other areas of the State, this outlook calls for equal chances of above or below normal precipitation.

Next Update:

The next Bulletin 120 Forecast update will be produced for conditions on June 14, 2011, and will be available by Thursday, June 16, 2011. If you need guidance before then, or have any questions, please contact us:

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Important Links

Full Natural Flow Data:

Daily FNF

http://cdec.water.ca.gov/cgi-progs/reports/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/reports/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/reports/FLOWOUT

Precipitation Data:

Northern Sierra 8-Station Precipitation Tabulation Table
http://cdec.water.ca.gov/cgi-progs/products/8-Stations_Tab.pdf
San Joaquin 5-Station Precipitation Tabulation Table
http://cdec.water.ca.gov/cgi-progs/products/5-Stations_Tab.pdf
2010 WY Precipitation Summary
http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM

Snow Data:

Latest Snow Sensor Report

http://cdec.water.ca.gov/cgi-progs/snow/PAGE6

Latest Statewide Summary of Snow Water Equivalents

http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ

Monthly Snow Course Report

http://cdec.water.ca.gov/cgi-progs/snow/COURSES

California Nevada River Forecast Center Snow Melt Guidance Products:

Snow Data and Spring Seasonal Runoff Forecasts http://www.cnrfc.noaa.gov/snowmelt.php
20-Day Snowmelt Guidance (Raw Model Output)
http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSESP.php

Peak 1-Day Stream flow Volume and Date Forecast http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSSPK.php

Extended Regional Forecasts:

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php
Climate Prediction Center 6-10 Day Outlook Forecasts http://www.cpc.ncep.noaa.gov/products/predictions/610day/
Climate Prediction Center One-Month Outlook Forecasts http://www.cpc.noaa.gov/products/predictions/90day/
Climate Prediction Center Three-Month Outlook Forecasts http://www.cpc.noaa.gov/products/predictions/90day/

Drought Information:

U.S. Seasonal Drought Outlook http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html

El Nino/La Nina:

http://www.cpc.ncep.noaa.gov/products/analysis monitoring/enso advisory/